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EXAMINER	
NGUYEN, TAN D	
ART UNIT	**PAPER NUMBER**
3689	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/058,830	COHEN ET AL.	
	Examiner	Art Unit	
	Tan Dean D. Nguyen	3689	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 August 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-7 and 9-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-7 and 9-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/27/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 8/27/08 was filed after the mailing date of the application on 1/30/02. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Amendment

2. The amendment of 8/11/08 has been entered. Claims 1-3 (method), 5-7 (system), and 9-11 (method) are pending and rejected below. Claims 9-11 are broadest and will be examined first. Claims 4, 8 and 12-14 have been canceled.

As of 8/11/08, independent method claim 9 is as followed:

9. (Currently Amended) Computer implemented method for computing demand forecast information for a demand forecast application capable of being graphically represented by a demand forecast tree having a single top level node with a plurality of branches directly emanating therefrom, each branch of the plurality of branches having at least one node with a time series of observations associated therewith, the method comprising the steps of:

a) providing a database for storing time series of observations;

b) providing a plurality of computer servers, each computer server independently computing demand forecast information for one or more branches of the plurality of branches of the demand forecast tree, wherein the number of provided computer servers is less than the number of branches;

c) determining a computational demand for each branch of the plurality of branches of the demand forecast tree by determining a number of bottom level nodes comprising each branch;

d) for each computer server of said provided computer servers, allocating the computer server each one of the plurality of provided computer servers for processing one or more branches such that all of said branches have been allocated among said provided computer servers based on the computational demand for each branch, and such that a total computational demand associated with each computer server is substantially equal ~~among said plurality of provided computer server,~~ wherein the total computational demand associated with each computer server is determined by adding the computational demand demands for each allocated branch;

e) computing with each provided computer server demand forecast information from observations stored in said data base.

Note: for convenience, letters (a)-(e) are added to the beginning of each step.

3. Note: In claim 9, step (a), the phrase "for storing … observation" is not a positively recited method step but, rather, is mere intended use of the database.

4. Similarly, in step (d), the phrase "for processing one or more branches …each allocated branch" is not a positively recited method step but, rather, is mere intended use of the allocated server. See MPEP 2173.05 (q), 2106, and 2111.04, which indicate that a method claim requires active, positive steps.

5. Also, in a method claim, the use of passive limitation such as “branches have been allocated” in step (d) , “is done simultaneously” in claim 10 and “such that the expected time to compute….” Are interpreted as “being capable of”. Also, the term "capable of" as shown in the preamble or here normally carry no patentable weight since it merely indicates the capacity of “carrying out a task” and not "doing the task itself”.

As for the limitation “times series of observations”, they are considered as non-functional descriptive material (NFDM) on the data of “…”, thus having no patentable weight. The mere insertion of “price” data over “data” does not “impart functionality when employed as a computer component”, thus having no patentable weight.

See MPEP 2106.01 “Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” In this context, “functional descriptive material” consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of “data structure” is “a physical or logical relationship among data elements, designed to support specific data manipulation functions.” The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) “Nonfunctional descriptive material” includes but is not limited to music, literary works, and a compilation or mere arrangement of data.

Claim Rejections - 35 USC § 112

6. Claims 1-3, 5-7, and 9-11are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1) In claim 9, it's not clear the relationship of "demand forecast information" of step (b) and "a computation demand" of step (c)? Is the "computer demand" of step (c) is a part of the "demand forecast information" of step (b)?

2) In step (d), the phrase "for each computer server of said provided computer servers, allocating the computer server each one of the plurality of provided computer servers" is vague? How can "each computer server" allocates itself?

3) It's not clear the relationship of step (e) to the previous steps of (c) and (d) and how the last step achieve the scope of the claim?

4) Similarly, independent claims 1 and 5, which appear to have the same claims and scopes as in claim 9 above, are rejected for the same reason set forth above.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 9-11 (method[1]), 1-3 (method[2]), and 5-7 (system[2]) are rejected under 35 U.S.C. 103(a) as being unpatentable over WOLF ET AL.

In a similar method/system for load balancing of demand forecast, WOLF ET AL discloses a computer implemented method for computing demand forecast information for a demand forecast application [capable of being graphically represented by a demand forecast tree having a single top level node with a plurality of branches directly emanating therefrom, each branch of the plurality of branches having at least one node with a time series of observations associated therewith], the method comprising the steps of:

a) providing a database for storing information/data (copies) time series of observations);

{see Fig. 1, col. 1, lines 50-67, col. 2, lines 15-20, , col. 9, lines 1-67. cols. 13-14}

b) providing a plurality of computer servers, each computer server independently computing demand forecast information for one or more branches of the plurality of branches of the demand forecast tree, wherein the number of provided computer servers is less than the number of branches;

{see Figs. 4-6, cols. 13-14}

c) determining a computational demand for each branch of the plurality of branches of the demand forecast tree (matrix) by determining a number of bottom level nodes comprising each branch;

{see Fig. 6, col. 15, lines 15-67}

d) for each computer server of said provided computer servers, allocating the computer server each one of the plurality of provided computer servers [for processing one or more branches such that all of said branches have been allocated among said provided computer servers based on the computational demand for each branch, and such that a total computational demand associated with each computer server is substantially equal ~~among said plurality of provided computer server,~~ wherein the total computational demand associated with each computer server is determined by adding the computational demand demands for each allocated branch];

e) computing with each provided computer server demand forecast information from data/information (observations) stored in said data base.

{see Figs. 4-6, col. 13-15}.

WOLF ET AL fairly teaches the claimed invention except for the function in the data of step (a) which is called times series of observations. However, it would have been obvious to apply to the load balancing of computer servers on other types of business application data or information such as times series of observations data as mere using other types of similar business data/information.

11. As for dep. claims 10-11 (part of 9 above) which deal with allocating tasks for each branch or computing resources, these are shown cols. 5-9, 14 (Table 2), Figs. 5-6. Also, in a method claim, the use of passive limitation such as “branches have been allocated” in step (d) , “is done simultaneously” in claim 10 and “such that the expected time to compute….” Are interpreted as “being capable of”. Also, the term "capable of"

as shown in the preamble or here normally carry no patentable weight since it merely indicates the capacity of “carrying out a task” and not "doing the task itself".

As for system claims 5-7, which are the respective system to carry out the method claims 9-11 above, they are rejected over the system of WOLF ET AL as shown on Figs. 1-2 and 5-6, to carry out the method claims rejections as shown in the rejections of claims 9-11 above.

As for method claims 1-3, which have the same limitations as in method claims 9-11 above, they are rejected for the same rejections of claims 9-11 above.

Response to Arguments

12. Applicant’s arguments, see Amendment/Response, filed 8/11/08, with respect to all the previous rejections have been fully considered and are persuasive. However, they are moot in view of the new ground of rejections.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

No claims are allowed.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see http://pair-direct@uspto.gov. Should you have any questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

In receiving an Office Action, it becomes apparent that certain documents are missing, e. g. copies of references, Forms PTO 1449, PTO-892, etc., requests for copies should be directed to Tech Center 3600 Customer Service at (571) 272-3600, or e-mail CustomerService3600@uspto.gov .

Any inquiry concerning the merits of the examination of the application should be directed to Dean Tan Nguyen at telephone number (571) 27**2**-6806. My work schedule is normally Monday through Friday from 6:30 am - 4:00 pm. I am scheduled to be off every other Friday. Should I be unavailable during my normal working hours, my supervisor Janice Mooneyham can be reached at (571) 272-6805. The main FAX phone numbers for formal communications concerning this application are **(571) 273-8300**. My personal Fax is (571) 27**3**-6806. Informal communications may be made, following a telephone call to the examiner, by an informal FAX number to be given.

/Tan Dean D. Nguyen/
Primary Examiner, Art Unit 3689